

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of data access, said method comprising:
precharging a first bitline and a second bitline to a precharge voltage;
permitting charge sharing between a capacitance of a memory cell and one of the precharged first bitline and the precharged second bitline;
biasing the other of the precharged first bitline and the precharged second bitline to decrease a voltage level of the biased bitline below the precharge voltage in order to increase a refresh period; and
subsequent to said permitting charge sharing and said biasing, sensing a difference between a potential of the first bitline and a potential of the ~~biased~~ second bitline.
- 2.-3. (Canceled)
4. (Currently amended) The method according to claim 1, wherein sensing ~~[[a]]~~ the difference between a potential of the first bitline and a potential of the second bitline includes amplifying said difference.
5. (Original) The method according to claim 1, wherein said permitting charge sharing includes applying a potential to a gate of a transistor of the memory cell.
6. (Currently amended) The method according to claim 1, wherein said biasing includes applying a potential to a bias capacitor coupled to the ~~second bitline~~ the other of the precharged first bitline and the precharged second bitline.
7. (Currently amended) A method of data access, said method comprising:
selecting a wordline to perform charge sharing between a memory cell and a bitline coupled to the wordline;
asserting a bias signal corresponding to the wordline for decreasing a potential of a reference bitline; and

sensing a difference between a potential of [[a]] the bitline coupled to the wordline and [[a]] the decreased potential of [[a]] the reference bitline[[,]].

~~wherein charge sharing between a memory cell and the bitline coupled to the wordline occurs as a consequence of said selecting a wordline, and~~

~~wherein the potential of the reference bitline is altered as a consequence of said asserting a bias signal.~~

8. (Currently amended) The method according to claim 7, wherein said asserting [[a]] the bias signal occurs subsequent to said selecting a wordline.

9. (Currently amended) The method according to claim 7, wherein said sensing [[a]] the difference includes sensing a difference between the potential of the bitline and the altered potential of the reference bitline.

10. (Canceled)

11. (Currently amended) A method of data access, said method comprising:
precharging a first bitline and a second bitline to a precharge voltage;
permitting charge sharing between a capacitance of a memory cell and the precharged first bitline;

biasing a selected one of the precharged bitlines to decrease a voltage level of the biased bitline below the precharge voltage so as to increase a refresh period; and

subsequent to said permitting charge sharing and said biasing, sensing a difference between a potential of the first bitline and a potential of the second bitline.

12. (Canceled)

13. (Original) The method according to claim 11, wherein said biasing includes applying a potential to a bias capacitor coupled to the selected bitline.

14. (Currently amended) A semiconductor memory device comprising:
a precharging circuit configured and arranged to precharge [[a]] an active bitline and a reference bitline;

a memory cell configured and arranged to share charge with the active bitline;
a bias circuit configured and arranged to ~~decrease~~ a potential of the reference bitline to increase a refresh period in a semiconductor memory device; and
a sense amplifier configured and arranged to sense a difference between a potential of the active bitline and a potential of the reference bitline.

15. (Previously presented) The semiconductor memory device according to claim 14, wherein the memory cell includes a field-effect transistor and a capacitor.

16. (Currently amended) The semiconductor memory device according to claim 14, wherein the memory cell is coupled to a wordline and is further configured and arranged to share charge with the active bitline upon a predetermined alteration in a potential of the wordline.

17. (Canceled)

18. (Previously presented) The semiconductor memory device according to claim 14, wherein the bias circuit includes a bias capacitor coupled to the reference bitline.

19. (Previously presented) The semiconductor memory device according to claim 18, wherein the bias capacitor includes a metal-oxide-semiconductor field-effect transistor having a low threshold voltage.

20. (Previously presented) The semiconductor memory device according to claim 19, wherein a magnitude of the threshold voltage of the metal-oxide-semiconductor field-effect transistor is less than three hundred millivolts.

21. (Previously presented) The semiconductor memory device according to claim 18, wherein the bias capacitor includes an n-channel metal-oxide-semiconductor field-effect transistor having a low threshold voltage.

22. (Previously presented) The semiconductor memory device according to claim 21, wherein a magnitude of the threshold voltage of the metal-oxide-semiconductor field-effect

transistor is less than three hundred millivolts.

23. (Currently amended) The semiconductor memory device according to claim 14, further comprising:

- a second memory cell configured and arranged to share charge with the active bitline;
- a first isolation circuit configured and arranged to isolate the memory cell from the sense amplifier; and
- a second isolation circuit configured and arranged to isolate the second memory cell from the sense amplifier.